

## PATENT COOPERATION TREATY

**PCT****NOTIFICATION REGARDING THE  
CONFIRMATION OF PRECAUTIONARY  
DESIGNATIONS**

(PCT Rule 24.2(a), last sentence)

From the INTERNATIONAL BUREAU

To:

WEBER, Clifford, Kent  
 Thomas Jefferson University  
 Office of University Counsel  
 Suite 620  
 1020 Walnut Street  
 Philadelphia, PA 19107-5587  
 ETATS-UNIS D'AMERIQUE

Date of mailing ( <i>day/month/year</i> ) 31 March 2000 (31.03.00)		
Applicant's or agent's file reference THA01.PCT03		<b>IMPORTANT NOTIFICATION</b>
International application No. PCT/US99/19011	International filing date ( <i>day/month/year</i> ) 17 August 1999 (17.08.99)	Priority date ( <i>day/month/year</i> ) 17 August 1998 (17.08.98)
Applicant THOMAS JEFFERSON UNIVERSITY		

1. The applicant is hereby notified that, pursuant to the confirmation of precautionary designations, the following designated Offices will also be notified of the receipt of the record copy by the International Bureau:

List of designated Offices :  
 National: US

Name(s) of applicant(s) for  
 the designated States concerned : THAKUR, Madhukar (Mathew), L

2. This notification complements the Notification of Receipt of Record Copy (Form PCT/IB/301).
3. The applicant is reminded that:
- (i) the data appearing above, and especially the (list of) designation(s) should be carefully checked;
  - (ii) the time limits for entering the national phase in the designated Offices must be monitored by the applicant (see the Annex to Form PCT/IB/301).
4. A copy of this notification is being sent to the receiving Office.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No. (41-22) 740.14.35	Authorized officer P. Regis  Telephone No. (41-22) 338.83.38
--	---

## PATENT COOPERATIVE TREATY

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents  
United States Patent and Trademark  
Office  
Box PCT  
Washington, D.C. 20231  
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 17 May 2000 (17.05.00)	
International application No. PCT/US99/19011	Applicant's or agent's file reference THA01.PCT03
International filing date (day/month/year) 17 August 1999 (17.08.99)	Priority date (day/month/year) 17 August 1998 (17.08.98)
Applicant THOMAS JEFFERSON UNIVERSITY	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:16 March 2000 (16.03.00)☐ in a notice effecting later election filed with the International Bureau on:2. The election ☒ was☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Philippe Bécamel
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

# PATENT COOPERATION TREATY

REC'D 23 MAY 2000 18

WIPO

PCT

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To: CLIFFORD KENT WEBER  
THOMAS JEFFERSON UNIVERSITY  
OFFICE OF UNIVERSITY COUNSEL  
1020 WALNUT STREET-SUITE 620  
PHILADELPHIA, PA 19107-5587



**PCT**

R-31

## NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

Date of Mailing  
(day/month/year)

**18 MAY 2000**

Applicant's or agent's file reference

THA01.PCT03

### IMPORTANT NOTIFICATION

International application No.

PCT/US99/19011

International filing date (day/month/year)

17 AUGUST 1999

Priority Date (day/month/year)

17 AUGUST 1998

Applicant

THOMAS JEFFERSON UNIVERSITY

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

#### 4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/US

Commissioner of Patents and Trademarks  
Box PCT  
Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

Dameron Jones

Telephone No. (703) 308-1235



## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 23 MAY 2000

WIPO

PCT

Applicant's or agent's file reference THA01.PCT03	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US99/19011	International filing date (day/month/year) 17 AUGUST 1999	Priority date (day/month/year) 17 AUGUST 1998
International Patent Classification (IPC) or national classification and IPC IPC(7): A61K 51/00; A61M 36/14 and US Cl.: 424/1.69		
Applicant THOMAS JEFFERSON UNIVERSITY		


1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 3 sheets.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority. (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 0 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of report with regard to novelty, inventive step or industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand  16 MARCH 2000	Date of completion of this report  27 APRIL 2000
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer  Dameron Jones  Telephone No. (703) 308-1235

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US99/19011

**I. Basis of the report****1. With regard to the elements of the international application:\***☒ the international application as originally filed☒ the description:

pages 1-19 , as originally filed  
pages NONE , filed with the demand  
pages NONE , filed with the letter of \_\_\_\_\_

☒ the claims:

pages 20-21 , as originally filed  
pages NONE , as amended (together with any statement) under Article 19  
pages NONE , filed with the demand  
pages NONE , filed with the letter of \_\_\_\_\_

☒ the drawings:

pages 1-6 , as originally filed  
pages NONE , filed with the demand  
pages NONE , filed with the letter of \_\_\_\_\_

☒ the sequence listing part of the description:

pages NONE , as originally filed  
pages NONE , filed with the demand  
pages NONE , filed with the letter of \_\_\_\_\_

**2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.**

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).  
☐ the language of publication of the international application (under Rule 48.3(b)).  
☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

**3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:**

- ☐ contained in the international application in printed form.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority in written form.  
☐ furnished subsequently to this Authority in computer readable form.  
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

**4. ☒ The amendments have resulted in the cancellation of:**

☒ the description, pages NONE  
☒ the claims, Nos. NONE  
☒ the drawings, sheets/fig NONE

**5. ☐ This report has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\***

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\*Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US99/19011

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. statement**

Novelty (N)	Claims <u>1-9</u>	YES
	Claims <u>NONE</u>	NO
Inventive Step (IS)	Claims <u>1-9</u>	YES
	Claims <u>NONE</u>	NO
Industrial Applicability (IA)	Claims <u>1-9</u>	YES
	Claims <u>NONE</u>	NO

**2. citations and explanations (Rule 70.7)**

Claims 1-9 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest the composition as set forth by Applicant in independent claim 1. In addition, all of the claims have industrial applicability.

----- NEW CITATIONS -----

NONE

CORRECTED  
VERSION\*CORRECTED  
VERSION\*\*

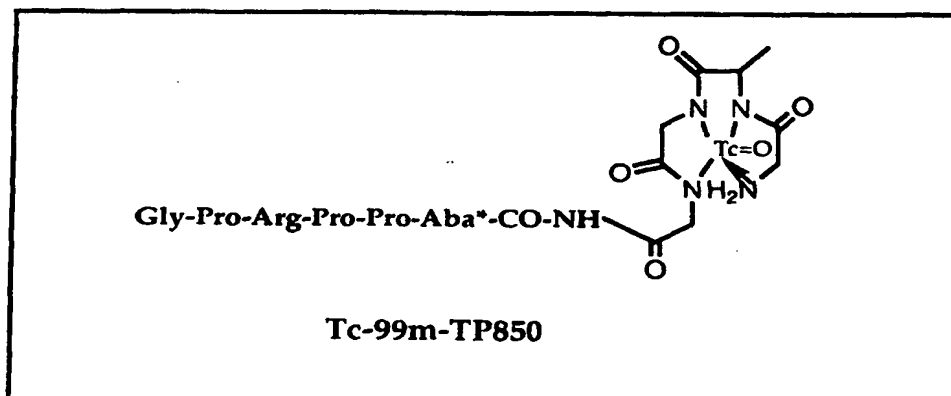
PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau

## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>7</sup> : <b>A61K 51/00, A61M 36/14</b>		<b>A3</b>	(11) International Publication Number: <b>WO 00/09076</b>
			(43) International Publication Date: 24 February 2000 (24.02.00)
(21) International Application Number: PCT/US99/19011		(81) Designated States: CA, JP, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).	
(22) International Filing Date: 17 August 1999 (17.08.99)			
(30) Priority Data: 60/096,803 17 August 1998 (17.08.98) US		Published With international search report.	
(71) Applicant (for all designated States except US): THOMAS JEFFERSON UNIVERSITY [US/US]; 1020 Walnut Street, Philadelphia, PA 19107 (US).		(88) Date of publication of the international search report: 11 May 2000 (11.05.00)	
(72) Inventor; and (75) Inventor/Applicant (for US only): THAKUR, Madhukar (Mathew), L. [US/US]; 44 Lakeview Drive, Cherry Hill, NJ 08003 (US).			
(74) Agent: WEBER, Clifford, Kent; Thomas Jefferson University, Office of University Counsel, Suite 620, 1020 Walnut Street, Philadelphia, PA 19107-5587 (US).			

(54) Title: IMAGING WITH TC-99M LABELED FIBRIN-ALPHA-CHAIN PEPTIDE



## (57) Abstract

The present invention involves compositions for radiolabeled agents for imaging mammalian tissue or cells, compositions for radiolabeling agents that bind to mammalian tissue or cells, compositions for radiolabeling agents that bind to fibrin, and methods of using said compositions.

\*(Referred to in PCT Gazette No. 26/2000, Section II)

\*\*(Referred to in PCT Gazette No. 31/2000, Section II)

**FOR THE PURPOSES OF INFORMATION ONLY**

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece			TR	Turkey
BG	Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MN	Mongolia	UA	Ukraine
BR	Brazil	IL	Israel	MR	Mauritania	UG	Uganda
BY	Belarus	IS	Iceland	MW	Malawi	US	United States of America
CA	Canada	IT	Italy	MX	Mexico	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NE	Niger	VN	Viet Nam
CG	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NO	Norway	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	NZ	New Zealand		
CM	Cameroon			PL	Poland		
CN	China	KR	Republic of Korea	PT	Portugal		
CU	Cuba	KZ	Kazakstan	RO	Romania		
CZ	Czech Republic	LC	Saint Lucia	RU	Russian Federation		
DE	Germany	LI	Liechtenstein	SD	Sudan		
DK	Denmark	LK	Sri Lanka	SE	Sweden		
EE	Estonia	LR	Liberia	SG	Singapore		



# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US99/19011

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61K 51/00; A61M 36/14

US CL : 424/1.69

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 424/1.1.11, 1.65, 1.69; 534/14

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EAST, BIOSIS, MEDLINE, USPATFUL

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X, P ----- Y, P	US 5,968,476 A (DEAN et al) 19 October 1999, see entire document, especially, abstract; column 6, lines 18-31; column 8, lines 59-62; columns 31-32, claims 1 and 7-8.	1, 3-4, 7-9 ----- 2, 5-6

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention:
*A* document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
*E* earlier document published on or after the international filing date	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*G* document member of the same patent family
*O* document referring to an oral disclosure, use, exhibition or other means	
*P* document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

04 JANUARY 2000

Date of mailing of the international search report

07 FEB 2000

Name and mailing address of the ISA/US  
Commissioner of Patents and Trademarks  
Box PCT  
Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

D. Jones

Telephone No. (703) 308-1235